

about different topics: prevalence, relation between neurological lesion and criminality...

Results.— This analysis highlights a number of major issues:

— all published articles are about inmates' populations from North America, Australia and Northern Europe;

— many studies, including two recent meta-analysis, have found prevalences of history of TBI to be between 40 and 60% of studied populations.

Conclusion.— Based on these results, authors conducted a study to establish, for the first time in France, the prevalence of history of TBI among a population of incomers in a French prison.

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P002-e

History of traumatic brain injury among prisoners: Differences depending on the severity of the reported trauma

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Keywords: Traumatic brain injury; Prison; Prisoner

Introduction.— Two meta-analyses have highlighted a significant prevalence of history of TBI in incarcerated populations [1,2]. A prevalence survey has been conducted at Fleury-Mérogis prison.

Objective.— Establish the prevalence of history of TBI and epilepsy in a population of incomers in prison and to explore the links between TBI, epilepsy and criminality.

Methodology.— A questionnaire was filled with all incomers at Fleury-Mérogis prison during a period of 3 months.

Results.— The prevalence of history of TBI is 32% among adult males. Depending on the TBI severity, different profiles could be described concerning criminal course, perceived health, treatments and psychoactive substances used.

Conclusion.— These results should lead to better screening in this population and adapted support according to the severity of the TBI.

References

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- [2] Shiroma EJ, Ferguson PL, Pickelsimer EE. Prevalence of traumatic brain injury in an offender population: a meta-analysis. *J Correct Health Care* 2010;16:147–59.

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P003-e

“Outcome and quality of life of 23 severe brain injured patients taken care of in an early post-acute rehabilitation unit”

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Keywords: Severe traumatic brain injury; Quality of life; Outcome; Early post-acute rehabilitation unit

Introduction.— This study describes the outcome and the quality of life (QOL) of patients taken care of in the early post-acute rehabilitation unit of the Mulhouse central hospital.

Interviews were taken place in the patients' home. Two specific questionnaires were used: “the European Brain Injury Society document” for the general outcome, and “Quality of Life after Brain Injury” (QOLIBRI).

Results.— On average 26 months after the trauma, the 23 patients followed were found with physical, mostly moderate, severe cognitive and emotional deficiencies and functional elaborate incapacities. The QOL averages 67.9%, and is disrupted by dependency in elementary functional tasks and the level of life expectations of patients. It progresses along with the GOS-E, showing the patients are aware of their handicap.

Conclusion.— These deficiencies and incapacities alter the patient's QOL and justify a long lasting personalized multidisciplinary follow-up.

Further reading

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P004-e

Visual rehabilitation with a vision-trainer instrument for patients with severe acquired brain injury (sABI): Two case reports

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Keywords: Acquired brain injury; Rehabilitation; Visual trainer

Introduction.— The severe impairment of the visual acuity and visual field is one of the perceptual disturbances that most interfere with rehabilitation programs for ABI. Retimax Vision-Trainer is a biofeedback device that has the purpose to improve visual function by means of the detection of a visual evoked potential associated with a sound feedback.

Observation.— We evaluated the effectiveness of rehabilitative treatment in two patients with ABI:

— M.U., male, 53 aged, with a right hemisphere cerebral haemorrhage 24 months before, LCF=8, no neglect, left homonymous hemianopia;

— G.U., female, 24 aged with a cerebellar haemorrhage (9 years before, with a period of unresponsiveness of 7 years), LCF=6, bilateral visual acuity 2/10 for distance, 6 DW for near, nystagmus, right exotropia, left homonymous hemianopia.

Patients were submitted to the treatment of photostimulation, 10 sessions twice a week. In M.U. we noticed a significant visual field enlargement to the left, documented by Goldmann perimetry. In G.U. it was observed an increase of 1/10 in visual acuity for distance and near, with functional advantages in BADL.

Discussion.— We believe that Retimax Vision-Trainer may be an effective rehabilitative tool, provided there is a satisfactory attentional and cognitive competence.

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P005-e

Voxel-based statistical analysis of brain metabolism in traumatic brain injury patients with growth hormone deficiency after growth hormone replacement treatment

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Keywords: Traumatic brain injury; Growth hormone; PET; Cognitive function